

WHAT IS CLAIMED IS:

1. A method for verifying a command in a vehicle remote communication system, said remote communication system including a remote transmitter, a  
5 receiver module and a control module connected by a communication bus in a vehicle body, the control module in communication with at least one vehicle system, said method comprising the steps of:
  - a) transmitting an activation signal from said transmitter, said first  
signal received and decoded by said receiver module;
  - 10 b) transmitting a first message from said receiver module along said communication bus, said first message received by said control module;
  - c) transmitting an acknowledgment message from said control module along said communication bus, said acknowledgment message  
15 received by said receiver module;
  - d) re-transmitting said first message from said receiver module along said communication bus, said re-transmitted first message received by said control module; and
  - 20 e) initializing a vehicle system command from said control module to said at least one vehicle system, thereby preventing an inadvertent activation of said at least one vehicle system.
2. The method according to claim 1 wherein said activation signal in step  
a) is transmitted by pressing a button on said remote transmitter.  
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3. The method according to claim 1 wherein said activation signal in step  
a) is transmitted by pressing at least two buttons on said remote transmitter.
4. The method according to claim 3 wherein for each button press, said  
30 transmitter transmits a unique RF message to complete said activation signal.

5. The method according to claim 1 wherein steps c) and d) are repeated at least once prior to performing step e).

5        6. The method according to claim 1 wherein said at least one vehicle system is an engine remote start system.

7. The method according to claim 1 wherein said at least one vehicle system is a remote keyless entry system.

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8. A vehicle remote communication system, comprising:

a remote transmitter having at least one pushbutton, said remote transmitter operable to transmit an activation signal;

a receiver module mounted in a vehicle, said receiver module operable to  
15 receive said activation signal from said remote transmitter;

a control module mounted in said vehicle;

a communications bus mounted in said vehicle and connecting said receiver module and said control module; and

at least one vehicle system in communication with said control module,

20        whereby said receiver module and said control module validate said activation signal by transmitting a first message from said receiver module along said communication bus, said first message received by said control module, transmitting an acknowledgment message from said control module along said communication bus, said acknowledgment message received by said receiver  
25 module, and re-transmitting said first message from said receiver module along said communication bus, said re-transmitted first message received by said control module, thereby preventing an inadvertent activation of said at least one vehicle system.

30        9. The communication system according to claim 8 wherein said activation

signal is transmitted by pressing a pushbutton on said remote transmitter.

10. The communication system according to claim 8 wherein said activation  
signal is transmitted by pressing at least two pushbuttons on said remote  
5 transmitter.

11. The communication system according to claim 10 wherein for each  
pushbutton press, said transmitter transmits a separate RF message to complete  
said activation signal.  
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12. The communication system according to claim 8 wherein said at least  
one vehicle system is an engine remote start system.

13. The communication system according to claim 8 wherein said at least  
15 one vehicle system is a remote keyless entry system.

14. The communication system according to claim 8 wherein said  
communication bus is a multiplex two-wire communication bus.

20 15. A method for remote starting a vehicle in response to pushbutton  
commands from a remote transmitter, said vehicle including a receiver module  
coupled to a powertrain control module via a communication bus, said method  
comprising the steps of:

said receiver module detecting said pushbutton commands indicative of a  
25 desire to remotely start said vehicle;

said receiver module transmitting a remote start request message to said  
powertrain control module via said bus;

said powertrain control module transmitting a request acknowledgment  
message to said receiver module via said bus in response to said remote start request  
30 message;

said receiver module transmitting a confirmation message to said powertrain control module via said bus in response to said request acknowledgment message; and

5       said powertrain control module initiating starting of said vehicle in response to said confirmation message.

16. The method according to claim 15 wherein said receiver module and said powertrain control module transmit said request acknowledgment message and said confirmation message at least twice.

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17. The method according to claim 15 wherein said activation signal is transmitted by pressing a pushbutton on said remote transmitter.

18. The method according to claim 15 wherein said activation signal is  
15 transmitted by pressing at least two pushbuttons simultaneously on said remote transmitter.

19. The method according to claim 15 wherein said activation signal is transmitted by pressing at least two pushbuttons sequentially on said remote  
20 transmitter.